

## ABSTRACT OF THE DISCLOSURE

The present invention provides a manufacturing method of a semiconductor device which can speedily peel extremely thin chips which are laminated to an adhesive tape without generating cracks or chippings. Ahead of a vibrator is brought into contact with a back surface of an adhesive tape to which a plurality of semiconductor chips obtained by dividing a semiconductor wafer are laminated. By applying longitudinal vibrations having a frequency of 1kHz to 100kHz and an amplitude of 1 $\mu$ m to 50 $\mu$ m, the chip is peeled from the adhesive tape. In applying the longitudinal vibrations to the adhesive tape, a tension in a horizontal direction is applied to the adhesive tape.